

1 MICROCOIL VASO-OCCLUSIVE DEVICE WITH MULTI-AXIS
2 SECONDARY CONFIGURATION

3

4 CROSS-REFERENCE TO RELATED APPLICATIONS

5 This application is a Continuation-in-Part of co-pending Application
6 Serial No. 09/671,021; filed September 26, 2000. *Patent Number 6,605,101*

7

8 FEDERALLY-SPONSORED RESEARCH OR DEVELOPMENT

9 Not Applicable

10

11 BACKGROUND OF THE INVENTION

12 This invention relates generally to the field of vascular occlusion
13 devices and methods. More specifically, it relates to an apparatus and
14 method for occluding a blood vessel by embolizing a targeted site (such as an
15 aneurysm) in the blood vessel.

16 The embolization of blood vessels is desired in a number of clinical
17 situations. For example, vascular embolization has been used to control
18 vascular bleeding, to occlude the blood supply to tumors, and to occlude
19 vascular aneurysms, particularly intracranial aneurysms. In recent years,
20 vascular embolization for the treatment of aneurysms has received much
21 attention. Several different treatment modalities have been employed in the
22 prior art. U.S. Patent No. 4,819,637 - Dormandy, Jr. et al., for example,
23 describes a vascular embolization system that employs a detachable balloon
24 delivered to the aneurysm site by an intravascular catheter. The balloon is
25 carried into the aneurysm at the tip of the catheter, and it is inflated inside
26 the aneurysm with a solidifying fluid (typically a polymerizable resin or gel)
27 to occlude the aneurysm. The balloon is then detached from the catheter by
28 gentle traction on the catheter. While the balloon-type embolization device